Centrality and Individual Differences in the Meaning of Daily Hassles

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ABSTRACT In this study we introduce the concept of centrality in an attempt to assess individual differences in the meaning underlying daily hassles Central hassles are defined as those which reflect important ongoing themes or problems in the person's life The characteristics of central hassles, and their role in psychological and somatic health, were assessed in a sample of 150 community-residing men and women The results indicate that central hassles vary in content from person to person and touch more on problems with personal needs and deficits in coping skills compared to noncentral hassles The dimension of centrality was found to play a significant role in the prediction of psychological symptoms Although the empirical case for the importance of centrality in the stress-illness relationship is inconclusive due to problems of confounding and a cross-sectional rather than longitudinal design, the ideas presented appear promising and provide a basis for further research on psychological vulnerability to stress

The conviction that psychological stress is a causal factor in mental and physical illness underlies much current theory and research in the biological and behavioral sciences Many researchers think of stress as a single, unidimensional environmental variable, such as the number or severity

This research was supported by a grant from the MacArthur Foundation awarded to Richard S Lazarus and Susan Folkman Correspondence should be sent to Rand J Gruen, Yale University, Department of Psychiatry, 25 Park Street, Room 606, New Haven, CT 06519

Journal of Personality 56 4, December 1988 Copyright © 1988 by Duke University Press CCC 0022-3506/88/$1 50

of recent life events This way of thinking is consistent with a traditional, linear, stimulus-response model of inquiry

From our point of view, this traditional model is inadequate as a basis for conceptualizing and studying psychological stress and its relationship to health Our position is that stress is best regarded as a complex system of variables Stress does not reside in any one variable, but is a product of many interacting person and environmental antecedents, mediating processes (such as appraisal and coping), and short-term and long-term outcomes, each capable of influencing the other (see Lazarus, DeLongis, Folkman, & Gruen, 1985, Lazarus & Folkman, 1984) For example, the extent to which a harmful or potentially harmful encounter between the person and the environment is stressful depends on the meaning or significance of that encounter, which in turn is based on the personal agendas and coping resources the person brings to it

In this article, we consider one important aspect of stress as a system, namely, individual differences in the personal significance of daily stressful events, or what we call daily hassles We suggest that not all daily hassles have equal significance for the person Those hassles which reflect ongoing themes or issues of particular concern in the person's life should have a more important impact on the psychological and physiological economy of the person than others, which, like traffic jams or accidents of weather, result from vicissitudes of the moment We call the former "central" hassles, and the latter "noncentral" or peripheral hassles Hassles which are high in centrality should be more important in predicting health outcomes for several reasons First, because of the psychological salience of central hassles, they are likely to result in preoccupations that continue long after an encounter seems to be over, as in Horowitz's (1976, 1982) concept of cyclical denial and intrusive thought following a traumatic event Second, central hassles should be more closely related to important patterns of goals, beliefs, and commitment As a consequence, they should generate more distress Third, central hassles should recur more frequently than peripheral ones because individuals' stable belief systems, coping ineptitudes, or other personal agendas should propel them into similar kinds of interpersonal and intrapsychic difficulties again and again

An implication of this reasoning is that procedures for measuring daily stress should differentiate between central and noncentral stressful experiences, as this should add to our understanding of the stress-illness relationship This position is similar to that taken by Brown and Harris

(1978), who found that the degree of depression experienced by women following a loss depended on the meaning of that loss for the individual, life events did not necessarily sum to result in greater stress reactions

The research described below is a preliminary attempt to explore the concept of centrality and its relationship to health outcomes The results from two studies are presented The first asks whether there are individual differences in the kinds of hassles rated as central or noncentral and examines the characteristics of the two kinds of hassles The analysis is based on a comparison of two specific encounters provided by each subject one that represented a central hassle and a second that represented a noncentral hassle The second study asks whether the dimension of centrality plays a significant role in the prediction of long-term health outcomes This analysis is based on the total number of hassles experienced by subjects over 5 months of the study

METHOD

The data analyzed in this study are part of a larger study on stress, coping, and adaptation (see Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986) Married partners were interviewed in their homes once a month for 6 months Husbands and wives were interviewed separately by different interviewers on the same day and, if possible, at the same time The interviews lasted about 1½ to 2 hours Subjects also received questionnaires to complete as homework during the periods between interviews

The original sample consisted of 85 married couples living in Contra Costa County, California, with at least one child at home In order to qualify for the study, females had to be between the ages of 35 and 45, their husbands, whose ages were not a criterion for eligibility, were between 26 and 54 Participants were Caucasian, primarily Protestant or Catholic, and had at least an eighth-grade education, an above-marginal family income ($18,000 for a family of four in 1981), and were not bedridden Couples were initially contacted through random digit dialing When a qualified couple was identified, the telephone interviewer asked if the respondent and his or her spouse would be willing to be contacted by the Stress and Coping Project Sixty-seven percent of the qualified respondents agreed to be contacted and then provided their names and addresses These potential subjects were sent a letter explaining the study and were later called by a project interviewer who answered questions and requested a home interview Forty-six percent of the qualified couples who received letters agreed to participate Thus, out of the total number of qualified respondents initially contacted by phone, 30% agreed to be in the study This response rate is comparable to that of other recently reported studies (see Folkman & Lazarus, 1980, Folkman, Lazarus, Pimley, & Novacek, 1987) People who refused to be in the study differed from those who participated only in years of education (mean refused = 14 3 years, mean accepted = 15 5 years) Ten couples dropped out of the study, yielding a final sample of 75 couples The average age of the women was 39 6 and the men, 41 4 The median family income was $45,000 Eighty-four percent of the men and 57% of the women were employed for pay The interviews were conducted in two 6-month waves from September 1981 through August 1982

Study 1

The purpose of this analysis was to test whether subjects could make a meaningful distinction between central and peripheral hassles in their own recent experience and to examine the characteristics of the two types of hassles[1]

MEASURES

The new *Hassles and Uplifts Scale* used here consists of a list of 53 items which identify sources of everyday stress It is a revised and shortened version (see DeLongis, Folkman, & Lazarus, 1988) of the one reported by Kanner, Coyne, Schaefer, and Lazarus (1981) and DeLongis, Coyne, Dakof, Folkman, and Lazarus (1982) In the revised version subjects were asked to rate each item with respect to how much of a hassle and/or an uplift it was for them during that day on a 4-point Likert scale (0 = none or not applicable, 3 = a great deal) The items cover a broad range of stresses a person might experience, including financial problems (having enough money for necessities, having enough money for extras), problems with one's spouse or family (sex, intimacy, time spent with family), and work-related hassles (clients, customers, patients, supervisor or employer) The scale was completed separately by husbands and wives in their homes on the four consecutive evenings preceding each of five monthly interviews, resulting in 20 measurement occasions

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[1] For purposes of statistical analysis, we treated our subjects as independent of their spouses In so doing, we may have overestimated the available degrees of freedom To examine this possibility, we adjusted the degrees of freedom to reflect the *N* of couples rather than the *N* of individuals In no case did a previously significant finding ($p <$ 05) become nonsignificant

In a *Hassles Interview* given during the fifth month of the study, subjects were presented with individualized lists of the 10 hassles that each had reported most frequently during the preceding 4 months on the 16 administrations of the Hassles and Uplifts Scale From this list each subject was asked to select one hassle that best represented a central hassle, and a second one that best represented a noncentral hassle The distinction between central and noncentral hassles was described for subjects in the following way

> Hassles can differ in how much they say about you as a distinctive individual Some hassles may be very central and revealing, and others may not be A central hassle is one that you have a lot of concern about This kind of hassle could reflect a troubling problem for you, perhaps a problem that is an ongoing theme in your life, such as an unresolved conflict, an unfulfilled need, or a personal inadequacy Other types of hassles—not very central ones—may happen as often and be just as aggravating, but they do not have to do with anything deeply important That is, they don't reflect issues that are central to you, but have to do with matters that are superficial

Subjects were then asked to focus on a specific and typical instance of a central hassle and a noncentral hassle within the general category covered by the hassle item For example, if the hassle item chosen as most central was "your child(ren)," they were asked to describe a specific hassle that had occurred with their child(ren) (e g , difficulties in school) For each of the two incidents chosen, they were then asked to indicate on 7-point Likert scales (1 = not at all, 7 = very much so or a great deal) how much they felt each of these hassles could be prevented from recurring by changing something about themselves or by changing something external to themselves (i e , the environment) In addition, subjects were asked to rate on the same 7-point scale the extent to which each of the following contributed to the two hassles their degree of control (or lack of control) over their feelings, their personal needs, goals, expectations, beliefs, or values, skills or lack of skills, the characteristics of the other person or persons involved, physical resources (e g , health, stamina, energy), the presence or absence of material resources (e g , money, equipment), society's rules, expectations, values, the subjects' habits and set ways of doing things, the characteristics of the physical environment (e g , the physical setting where they work, their house), and the policies and/or procedures of organizations or bureaucracies (e g , government agencies, insurance companies)

Subjects were also asked to describe how they felt in each incident by rating each of 24 emotions on 5-point Likert scales (0 = not at all, 4 = a great deal) The emotion items were grouped into four scales on the basis of a principal factor analysis (see Folkman & Lazarus, 1986) The first scale, called "disgusted/angry," consisted of four items disgusted, angry, frustrated, and disappointed ($\alpha =$ 87) The second scale, "worried/fearful," consisted of three items worried, fearful, and anxious ($\alpha =$ 81). The third scale, "pleased/happy," consisted of six items pleased, happy, exhilarated, eager, hopeful, and relieved ($\alpha =$ 80) The fourth, "confident/secure," consisted of three items confident, secure, and in control ($\alpha =$ 82)

RESULTS

The hassle items listed by subjects as most and least central in the hassles interview are shown in Table 1 Although 24% of the sample said that their most central hassle involved a problem with their children, there was a great deal of variability in the types of hassles rated as central by the remainder of the subjects

The specific incidents chosen as central and noncentral during the hassles interview were further examined with a repeated measures analysis of variance using the MANOVA procedure (O'Brien & Kaiser, 1985) and the Hotellings *t*-test statistic In presenting the results, the multivariate *F* for the overall analysis is provided, as well as the R^2 value and the *F* statistic for each individual test As shown in Table 2, subjects stated that they were more able to stop central as opposed to noncentral hassles from occurring by changing something about themselves, indicating that they felt more responsibility for causing central hassles than noncentral ones There was no difference in this regard when the question referred to subjects' changing something external to themselves

The problems that subjects saw as contributing to central hassles differed from those that contributed to noncentral hassles As shown in Table 3, a multivariate comparison indicated that problems with personal needs and expectations of others, interpersonal skills, and emotional

Table 1
Hassles Rated as Most and Least Central

% of subjects who endorsed hassle as most central[a]		% of subjects who endorsed hassle as least central
24 0	Your child(ren)	1 3
6 7	Your spouse	7
6 0	Health or well-being of a family member	1 3
6 0	Amount of free time	—
5 3	Your work load	3 3
5 3	Enough money for necessities (e g , food, clothing, housing, health care, taxes, insurance)	—
4 7	Family-related obligations	7
4 7	Meeting deadlines or goals on job	2 0
4 0	Being organized	7
3 3	The nature of your work	7
3 3	Your physical abilities	1 3
2 7	Enough money for extras (e g , entertainment, recreation, vacations)	2 7
2 7	Your smoking	7
2 7	Taking care of paperwork (e g , paying bills, filling out forms)	9 3
2 0	Your physical appearance	7
2 0	You job security	7
2 0	Political or social issues	2 7
1 3	Enough money for emergencies	7
1 3	Your supervisor or employer	—
1 3	Intimacy	—
1 3	Time spent with family	7
1 3	Your health	7
1 3	Housework	6 7
7	Sex	—
7	Fellow workers	2 0
7	Clients, customers, patients, etc	1 3
7	Enough money for education	7
7	Home repairs	7
7	Yardwork	3 3
7	Car maintenance	3 3
—	Your parents or parents-in-law	—
—	Other relative(s)	7

Table 1
Continued

% of subjects who endorsed hassle as most central[a]		% of subjects who endorsed hassle as least central
—	Your friend(s)	—
—	Financial care for someone who doesn't live with you	7
—	Investments	—
—	Your drinking	—
—	Mood-altering drugs	—
—	Contraception	—
—	Exercise(s)	3 3
—	Your medical care	—
—	The weather	14 0
—	News events	7 3
—	Your environment (e g , quality of air, noise level, greenery)	7
—	Your neighborhood (e g , neighbors, setting)	1 3
—	Conserving (e g , gas, electricity, water, gasoline)	6 0
—	Pets	10 7
—	Cooking	4 7
—	Home entertainment (e g , TV, music, reading)	—
—	Recreation and entertainment outside the •home (e g , movies, sports, eating out, walking)	—
—	Eating (at home)	1 3
—	Church or community organizations	—
—	Legal matters	—
—	Social commitments	1 7

Note $n = 150$

a Items are listed in rank order according to the percentage of people who endorsed the hassle as *most central*

Table 2
Comparison of Central and Noncentral Hassles Extent to Which They Can Be Stopped by Changing Self and Environment

Univariate tests Change strategies	Central hassles (mean)	Noncentral hassles (mean)	R^2	F
Can be stopped by changing self	3 85	3 05	08	13 12***
Can be stopped by changing environment	3 20	2 86	02	2 58

Note Multivariate $F(2, 147) = 7\ 48, p < \ 001$
$^{***}p < \ 001$

control contributed more to central hassles than to noncentral hassles The characteristics of other people involved, the subject's physical and material resources, society's rules and values, and the subject's habits and set ways of doing things also contributed more to central hassles than to noncentral ones, whereas the policies of bureaucracies or the characteristics of the physical environment did not An examination of the R^2 values associated with each F test shows that problems with needs and expectations, interpersonal skills, and emotional control played a more significant role in central hassles than did the other kinds of problems that were assessed

Table 4 shows the results of a multivariate comparison of emotions in central and noncentral hassles Subjects felt significantly more worried and fearful, more angry and disgusted, and less confident and secure in central hassles They also felt significantly more pleased and happy in central hassles An examination of the R^2 values shows that the emotions worry, fear, anger, and disgust were more closely associated with central hassles than were the other emotions

Study 2

The purpose of this analysis was to examine the relationship between the dimension of centrality and psychological symptoms and somatic

Table 3
Comparison of Central and Noncentral Hassles Contributing Problems

Univariate tests Contributing problems	Central hassles (mean)	Noncentral hassles (mean)	R^2	F
Needs, expectations	4 61	3 27	20	38 38***
Skills	2 74	1 73	19	34 36***
Emotional control	3 23	2 33	13	22 77***
Characteristics of other people	4 31	3 38	09	15 71***
Physical resources	2 67	2 17	03	5 56*
Material resources	3 06	2 53	03	5 32*
Society's rules	2 97	2 54	03	5 19*
Habits	3 64	3 13	03	5 11*
Physical environment	2 45	2 81	02	2 62
Policies of bureaucracies	2 61	2 67	00	05

Note Multivariate $F(10, 140) = 10\ 31, p < 001$
$^{*}p < 05$
$^{***}p < 001$

health [2,3] We also wanted to compare the role played by centrality in the prediction of health outcomes to that of other measures designed to assess the extent of stress a person has experienced, namely frequency and intensity (DeLongis et al , 1982, Kanner et al , 1981, DeLongis et al , 1988) In Study 2, centrality was treated as a continuous variable, rather than as a dichotomous variable as in Study 1

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2 See footnote 1

3 Because the centrality ratings were obtained at only one time point, during the fifth month of the study, it was not possible to do a prospective analysis examining the relationship between centrality and psychological and somatic health

Table 4
Comparison of Central and Noncentral Hassles Emotions

Univariate tests Emotion scales	Central hassles (mean)	Noncentral hassles (mean)	R^2	F
Worried/fearful	4 85	2 11	43	110 61***
Angry/disgusted	9 19	6 53	25	48 18***
Pleased/happy	3 68	2 91	03	4 77*
Confident/secure	3 67	4 33	03	4 25*

Note Multivariate $F(4, 145) = 35\ 75, p < \ 001$
*$p < \ 05$
***$p < \ 001$

MEASURES

The *Centrality Rating Scale* was completed as homework following the fifth interview This scale consists of the same 53 hassles that are listed on the Hassles and Uplifts Scale Subjects were asked to rate, on 7-point Likert scales (1 = not at all, 7 = extremely) the centrality of each of the hassles they had experienced over the past 5 months The definition of centrality on the questionnaire was the same as used in the interview in Study 1

Psychological symptomatology was assessed with the Hopkins Symptom Checklist (HSCL) (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974) Subjects rated the extent to which each of 58 symptoms bothered them on 4-point Likert scales (1 = not applicable or not at all, 4 = extremely) The checklist was administered in the sixth month of the study The HSCL contains five subscales Items related to the somatization subscale were deleted in the current analysis to avoid overlap with the outcome measure of somatic health Because of the high intercorrelations among the remaining subscales, a subject's score on the HSCL was calculated by summing the ratings on the remaining items For additional information about how we have previously used this checklist and our findings, see Kanner et al (1981), DeLongis et al (1982), Folkman, Lazarus, Gruen, & DeLongis (1986), Lazarus and DeLongis (1983), Lazarus (1984), and Lazarus et al (1985)

Somatic health was also assessed in the sixth month of the study using a self-report questionnaire adopted with minimal modification from one used by the Alameda County Human Population Laboratory (Belloc & Breslow, 1972, Belloc, Breslow, & Hochstim, 1971) It contains ques-

Table 5
Mean Scores on Major Study Variables

Study variables	Mean	Standard deviation
Average severity	1 31	23
Average frequency	6 21	2 79
Average centrality	2 16	75
Psychological symptoms	18 37	15 04
Somatic health	1 39	1 21

tions about a wide variety of chronic conditions and specific somatic symptoms, as well as disability in working, eating, dressing, and mobility (see DeLongis et al , 1982) The questionnaire has been found to be acceptably reliable and valid in comparison with medical records (Andrews, Schonell, & Tennant, 1977, Meltzer & Hochstim, 1970) Subjects were assigned to one of six levels of health (ranging from healthy to disabled), according to their most serious health problems, with high scores indicating poor health Items that pertained to the person's overall energy level were excluded from the analysis because of their overlap with psychological symptoms

RESULTS

The *average frequency* score for hassles was obtained by summing the frequency ratings associated with a given hassle over the 20 administrations of the Hassles and Uplifts Scale and dividing these sums by the number of different hassles experienced The *average severity* score for hassles was obtained by first summing the severity scores associated with a given hassle over the 20 administrations of the Hassles and Uplifts Scale and dividing by the frequency for that hassle These averages were then summed and divided by the number of different hassles experienced The *average centrality* score was obtained by summing the centrality ratings on the Centrality Rating Scale and dividing by the number of different hassles experienced The means and standard deviations associated with these variables and the measures of psychological symptoms and somatic health are presented in Table 5 The intercorrelations between these variables are presented in Table 6 The correlations between centrality and severity and frequency were 47 ($p <$ 001) and 24 ($p <$ 01), respectively The correlation between severity and frequency

Table 6
Correlations Between Major Study Variables

Study variables	Average severity	Average frequency	Average centrality	Psychological symptoms	Somatic health
Average severity		24**	47***	32***	14
Average frequency			24**	46***	13
Average centrality				45***	17*
Psychological symptoms					23**
Somatic health					

*$p <$ 05
**$p <$ 01
***$p <$ 001

was 24 ($p <$ 01) The correlations between severity, frequency, and centrality, and psychological symptoms were 32 ($p <$ 001), 46 ($p <$ 001), and 45 ($p <$ 001), respectively Centrality was significantly related to somatic health ($r =$ 17, $p <$ 05), but the severity and frequency measures were not

Because severity, frequency, and centrality were significantly intercorrelated, we wanted to examine the question of whether centrality contributed uniquely to the prediction of psychological symptoms after the variance attributable to severity and frequency had been partialled out of the equation A hierarchical regression equation was set up in which severity, frequency, and centrality were forced into the equation in three successive steps Severity was entered first, frequency second, and centrality third A comparable analysis with somatic health as the dependent variable was not performed because of the low correlations between centrality, severity, and frequency, and the outcome measure As shown in Table 7, the centrality scores added significantly to the explained variance in psychological symptoms after the variance accounted for by severity and frequency had been partialled out

DISCUSSION

The findings show that the subjects in this study were able to draw upon the concept of centrality to distinguish their own stress experiences We

Table 7
Stepwise Regression Analysis Psychological Symptoms Predicted by Hassles Severity, Frequency, and Centrality

	R^2	Adjusted R^2	F	R^2 change	Partial correlation
Step 1–severity	12	11	14 9****	12****	09
Step 2–frequency	25	24	18 9****	14****	33
Step 3–centrality	32	30	17 3****	07****	26

****$p < 0001$

do not know the extent to which this ability was related to the relatively high socioeconomic status of the sample, which may limit the generalizability of the findings Nevertheless, the findings elaborate the meaning of the concept of centrality and indicate that centrality plays a unique role in the prediction of psychological symptoms Several points seem particularly important

First, what was central for one person was not necessarily central for another We might have expected that some types of hassles, for example, those having to do with intimate social relations or those related to life goals such as achievement or social esteem, would generally be seen by everyone as most central because of the importance of these issues in most people's lives However, as it turned out, people varied in the hassles they listed as central, even seemingly trivial hassles such as taking care of paperwork were central for some individuals

Second, the individuals involved seemed to play an important role in causing central hassles, central hassles seemed to reflect, to a significant degree, problems with personal needs and expectations, and/or deficits in coping skills This fits the psychodynamic view that the personal agendas that people bring with them to a stressful encounter may help contribute to the problem (Wachtel, 1977)

It would be simplistic, however, to argue that the person alone causes central hassles For example, in describing a chronic central hassle, one subject complained that her marriage was lacking in intimacy In discussing the problems that contributed to the hassle, she said that she valued physical intimacy but it was hard for her husband to respond emotionally The problem was compounded, however, by her lack of control over her feelings, the more upset she got, the more she pressured him and the more negatively he reacted As we have often noted (e.g , Lazarus & Folkman, 1984, Lazarus et al , 1985), the person and the environment must be viewed as being in a mutually reciprocal, causal relationship In our view, psychological stress defines a relationship between the person and the environment to which both contribute. The husband in the above vignette was indeed at fault, but the wife also contributed to the recurrence of the problem.

Third, to a considerable degree central hassles produced more emotional distress, and at the same time more positive feelings when things worked out well, than did noncentral hassles. This finding suggests that the stakes in central hassles (i.e., the possibility for harm, loss, mastery, or gain) are greater than those in noncentral hassles.

Fourth, the dimension of centrality played an important role in the prediction of psychological symptoms. Even though centrality, severity, and frequency were significantly related to one another, centrality contributed uniquely to the prediction of psychological symptoms after the variance attributable to severity and frequency had been partialled out of the equation.

The findings indicate that in order to understand the role which stress plays in psychological and somatic health, stress must be studied from multiple perspectives. In addition to the frequency and severity of the stress experienced, we must take into account the significance or centrality of the event for the individual. The fact that there are individual differences in what constitutes a central hassle has important ramifications for measurement. It means that we must identify what is central for each person.

Consider, as an example, the hassle of a business mistake that is seen as very undesirable by two persons. For the individual who has vulnerable self-esteem with respect to competence on the job, the hassle is likely to touch on a central psychological theme and thus be extremely threatening and psychologically disruptive. For the individual whose self-esteem is not so clearly intertwined with job performance, the same hassle may be much less disturbing at the time or less likely to disturb the person afterwards. A similar point is made by Hammen, Marks, Mayol, and deMayo (1985), who found that individuals with strong dependency needs were more likely to become depressed following events which engaged these needs than they were following events that did not. This approach conflicts sharply with approaches that assume that a given stressful encounter will have the same impact on people's psychological well-being.

We have tried to make a case for the importance of centrality in the prediction of psychological symptoms. Although plausible, the case is not proven because of the problem of circularity that plagues research in this area (see Dohrenwend, Dohrenwend, Dodson, & Shrout, 1984, Lazarus et al , 1985) In the present case there are several possible sources of circularity that should be examined The first is that the strong relationship between central hassles and symptoms may be an artifact of the instructions, by defining central hassles as events that might touch on "unresolved conflicts or personal inadequacies," we may have confounded the dimensions of centrality and symptomatology On the other hand, thorough reading of the hassles classified as central (from the hassles interview) showed that only a small fraction of them reflected stressful encounters that might be viewed as indicative of pathology Another potential problem is that individuals high in symptoms may be prone to rate the hassles they experience as more central than those who are low Related to this is the question of whether a bias was introduced by asking subjects to rate hassles on the dimension of centrality in a post-hoc fashion. Although these methodological problems must be handled with greater care in future studies, we believe they do not totally mitigate the argument in the present case

A second form of circularity, identical or overlapping items in the measure of stress (hassles) and the so-called outcome (psychological symptoms), is not relevant here, there is no overt item overlap between the hassle that is endorsed and the symptoms described in the Hopkins Symptom Checklist Moreover, hassles—especially central ones—usually represent specific transactions or encounters, whereas psychological symptoms are more dispositional, referring to how subjects felt during the past week and probably longer, given the characteristic test-retest reliabilities of this type of scale In effect, hassles contain two agencies, the person and the environment, whereas symptoms can be thought of more as a property of the person

A third form of circularity is that both sets of correlated variables, hassles and symptoms, could reflect some third variable that they have in common (see Lazarus et al , 1985, for a more complete discussion of this form of circularity and its possible relationship to the Hassles Scale) It is quite likely that central hassles and psychological symptoms tap a common process having to do with what we would call *psychological vulnerability*

As used here, vulnerability refers to factors that result in a greater risk of experiencing psychological stress itself (that is, a sense of harm, threat, or challenge and their associated emotions), regardless of how it is coped with and whether or not it is associated with maladaptive outcomes An exploration of vulnerability to stress reactions is clearly a necessary step in understanding the overarching question of individual differences in the entire stress-outcome process

Vulnerability can be influenced by a number of variables, some of which derive from stable and aversive environmental conditions and some from stable properties of the person Examples of *environmental sources* of vulnerability include economic and social factors (Catalano & Dooley, 1983, Dooley & Catalano, 1980) that endanger jobs or create harmful work and living conditions It is an empirical question whether one or another of these environmental factors is more or less potent as a source of psychological stress reactions for people in general or for certain kinds of people

Person sources of vulnerability can be illustrated by stable values and patterns of commitment, and generalized beliefs about oneself and one's relationship to the world, for example, one's sense of control (Folkman, 1984, Lazarus & Folkman, 1984, Lefcourt, 1984, Rotter, 1966, 1975) They can also result from neurotic conflicts (Wachtel, 1977), inflexible coping styles (Averill, O'Brien, & DeWitt, 1977, Krohne, 1986), or coping ineptitudes that lead a person to handle certain kinds of stressful encounters badly For example, people who have a strong commitment to achievement are more likely to be threatened by criticism of their work than those for whom achievement is of little importance

The concept of vulnerability to psychological stress includes but does not completely overlap with the concept of psychopathology Strong and selective commitments make a person vulnerable to psychological stress in that conditions that thwart or endanger them are likely to be appraised as highly threatening However, this kind of vulnerability is not necessarily pathological or pathogenic In the same vein, a belief that one lacks the resources to achieve a particular goal will increase the risk of being threatened if that goal is important, but these beliefs are not, per se, pathological Thus, at the conceptual level the factors that create vulnerability to psychological stress may or may not involve psychopathology

The real test of our argument must, of course, be carried out at the empirical level The critical question is whether the concept of hassles centrality adds to our understanding of the relationship between stress reactions and psychological and somatic health Three steps still need to be taken to test this question First, instructions to subjects must get them to delineate the critical features and determining characteristics of central and peripheral hassles without creating any bias that leads them to relate centrality and symptomatology. Second, research on centrality must be designed longitudinally rather than cross-sectionally in order to evaluate the causal role of central hassles in psychological and somatic health. In doing so it is important that baseline measures of health be obtained in order to assess change. One of the dilemmas in causal analyses of somatic health status is its high stability; without change nothing can be said about its causation (see Kasl, 1983). The causal analysis should also take into account the likelihood of bidirectionality in that psychological and somatic symptoms can also be antecedents of hassles. Third, future research must attempt to predict individual differences in patterns of central hassles from antecedent vulnerability factors. Vulnerability factors can be regarded as the trait or dispositional variables on which appraisals of centrality depend, whereas appraisals of centrality themselves are best regarded as transactional variables that depend on the confluence of vulnerability factors and the environmental conditions that impact on them.

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Manuscript received November 10, 1986, revised April 6, 1988

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